

## CLAIMS:

1. A photosensitive apparatus, comprising:

a first video line, having associated therewith a first set of active photosensors, each active photosensor outputting a signal representative of light intensity thereon onto the first video line;

a first correction capacitor associated with the first video line, the correction capacitor adapted to retain a correction charge thereon to influence signals from the active photosensors on the first video line;

a second video line, having associated therewith a second set of active photosensors, each active photosensor outputting a signal representative of light intensity thereon onto the second video line;

a second correction capacitor associated with the second video line, the correction capacitor adapted to retain a correction charge thereon to influence signals from the active photosensors on the second video line;

a multiplexing node, accepting signals from the first video line and the second video line; and

final correction means for performing an offset correction operation on signals downstream of the multiplexing node.

2. The apparatus of **claim 1**, wherein there exists no amplifier between the first correction capacitor and the multiplexing node, and no amplifier between the second correction capacitor and the multiplexing node.

3. The apparatus of **claim 1**, further comprising

for each of the first video line and the second video line, a multiplexing transistor disposed between the correction capacitor and the multiplexing node.

4. The apparatus of **claim 1**, further comprising

for each of the first video line and the second video line, means for forcing a reference voltage onto the correction capacitor.

5. The apparatus of **claim 1**, the final correction means including  
a main correction capacitor associated with the multiplexing node, the  
main correction capacitor adapted to retain a correction charge thereon to  
influence the voltage signals from the active photosensors from the first video  
line and the second video line.

6. The apparatus of **claim 5**, further comprising  
means for determining the correction charge on the main correction  
capacitor, said determining means including means for sampling a plurality of  
voltage signals from the at least one dark photosensor over time and deriving the  
correction charge based on a plurality of sampled voltage signals from the at  
least one dark photosensor.

7. The apparatus of **claim 6**, further comprising  
at least one dark photosensor, the dark photosensor being adapted to  
receive no light thereon, outputting a reference signal onto the first video line.

8. The apparatus of **claim 7**, the determining means including means for  
applying a voltage related to an average of the plurality of voltage signals from  
the at least one dark photosensor to the correction capacitor.

9. The apparatus of **claim 8**, the determining means including  
an RC circuit, and  
means for transferring a plurality of voltage signals from the at least one  
dark photosensor to the RC circuit.

10. The apparatus of **claim 1**, wherein the first video line is associated  
with odd photosensors in a linear array, and the second video line is associated  
with even photosensors in a linear array.

11. A method of operating a photosensitive apparatus, the apparatus comprising:

- a first video line, having associated therewith a first set of active photosensors, each active photosensor outputting a signal representative of light intensity thereon onto the first video line;

- a second video line, having associated therewith a second set of active photosensors, each active photosensor outputting a signal representative of light intensity thereon onto the second video line; and

- a multiplexing node, accepting signals from the first video line and the second video line;

- the method comprising the steps of:

- performing a first offset-correction operation on signals on the first video line;

- performing a second offset-correction operation on signals on the second video line;

- following the first and second offset-correction operations, multiplexing the signals on the first video line and the second video line at the multiplexing node; and

- performing a final offset-correction operation on signals downstream of the multiplexing node.

12. The method of **claim 11**, wherein there exists no amplifier between the first correction capacitor and the multiplexing node, and no amplifier between the second correction capacitor and the multiplexing node.

13. The method of **claim 11**, the offset-correction operations on the first and second video line comprising the steps of

a first correction capacitor associated with the first video line influencing the voltage signals from the active photosensors on the first video line;

a second correction capacitor associated with the second video line influencing the voltage signals from the active photosensors on the second video line.

14. The method of **claim 13**, the offset-correction operations on the first and second video line comprising the step of

for each of the first video line and the second video line, forcing a reference voltage onto the correction capacitor.

15. The method of **claim 11**, the final offset-correction step including the step of

a main correction capacitor influencing voltage signals on the multiplexing node.

16. The method of **claim 15**, further comprising the step of determining a correction charge on the main correction capacitor.

17. The method of **claim 15**, the apparatus including at least one dark photosensor, the dark photosensor being adapted to receive no light thereon, outputting a reference signal onto the first video line, and

said determining step including sampling a plurality of voltage signals from at least one dark photosensor over time.

18. The method of **claim 17**, the determining step including applying a voltage related to an average of the plurality of voltage signals from the at least one dark photosensor to the main correction capacitor.

19. The method of **claim 11**, wherein the first video line is associated with odd photosensors in a linear array, and the second video line is associated with even photosensors in a linear array.